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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/939,599

08/28/2001

Yasuhiro Kawaguchi

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22850 7590 12/28/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

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ALEXANDRIA, VA 22314

EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1764

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/28/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/939,599

Applicant(s)

KAWAGUCHI ET AL.

Examiner

Ellen M. McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 10-15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/241,479.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the at least one polyoxypropylene glycol derivative containing two $-CH_3$ end groups may be the same and the refrigerant composition containing a fluorocarbon refrigerant and the polyoxypropylene glycol derivative may be the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

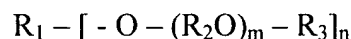
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al (4,267,064).

Applicants' arguments filed 10 October 2006 have been fully considered but they are not persuasive. As previously set forth, Sasaki et al ["Sasaki"] disclose oil compositions for use in the lubrication of rotary-type compressors for refrigeration equipment which comprises a polyglycol oil blended with specific amounts of at least one additive. The polyglycol oil has a kinetic viscosity in the range of 25-50 cSt at 98.9°C and is represented by the formula



wherein R_1 and R_3 are each a hydrogen atom, a hydrocarbon radical containing 1-20 carbon atoms including methyl, or an acyl group, and may be identical with, or different from, each other; R_2 is an alkylene group; n is an interger of 1-6; and $(m \times n)$ is 2 or greater. See column 2, lines 15-45. The alkylene group represented by R_2 includes ethylene, propylene, and polyoxypropylene groups. The examiner is of the position that the polyglycol oil of Sasaki meets the limitations of the polyoxyalkylene glycol derivative represented by the formula in claims 10 and 12. Sasaki also teaches that the oil compositions are suited to application in refrigeration compressors wherein halogen-containing refrigerants are used. See column 4, lines

26-35. Thus, the examiner is of the position that Sasaki meets the limitations of the above rejected claims.

Applicants argue that:

“None of the cited references specifically disclose polyoxyalkylene glycol derivatives having methyl groups on both ends. Sasaki discloses a polyglycol oil in which the two end groups might be essentially any of a hydrogen atom, or a hydrocarbon radical or acyl group. Sasaki provides no teaching, suggestion, or guidance for the selection of any particular hydrocarbon group, and specifically does not disclose methyl groups.”

This is not deemed to be persuasive because the disclosure of Sasaki is just as clear, or even more so, than applicants specification which also discloses broad ranges of suitable components for the end groups and for the oxyalkylene group on pages 6-7.

Applicants argue that:

“Further, none of the cited references disclose lubricating oils comprising a polyoxyalkyleneglycol derivative having the formula $\text{CH}_3 - (\text{OC}_3\text{H}_6)_m - \text{OCH}_3$, with a kinematic viscosity of 2 to 24 cSt at 100°C.”

This is not deemed to be persuasive because Sasaki discloses in column 3, lines 18-20, that the polyglycol oils have a kinematic viscosity in the range of 25-50 cSt at a temperature of 98.9°C.

The examiner is of the position that the same polyglycol compound oil having a kinematic viscosity of 24 cSt at 100°C (claimed invention) is indistinguishable from one having a kinematic viscosity of 25 cSt at 98.9°C. Additionally, applicants teach in the specification on page 17 that lubricating oil I, which most closely corresponds to the newly claimed polyoxyalkylene glycol derivative, has a kinematic viscosity of 2-50 cSt at 100°C, and preferably from 5-30 cSt at 100°C. The examiner is of the position that it is not clear where there is support

in the specification for the newly claimed viscosity range of 2-24 cSt at 100°C, except in an attempt to distinguish over the prior art.

Claim Rejections - 35 USC § 103

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over UK Patent Application 2,121,818 A.

Applicants' arguments filed 10 October 2006 have been fully considered but they are not persuasive. As previously set forth, the UK Patent Application (hereafter UK '818) teaches a polyglycol fluid having the formula $RO - (CH_2 - CHR' - O)_x - R''$ wherein R and R'' are hydrogen or C₁ to C₄ alkyl groups, R' is hydrogen or a C₁ to C₄ alkyl group, and x is at least 15, and preferably lower than 150, more preferably x is 25-100. See page 1, lines 28-36. While UK '818 does not disclose polyoxyalkyleneglycol derivatives wherein R, R' and R'' are methyl, the prior art specifically teaches that R, R' and R'' may be methyl. Accordingly, the claimed lubricating oil would have been obvious to one of ordinary skill in the art at the time the invention was made.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

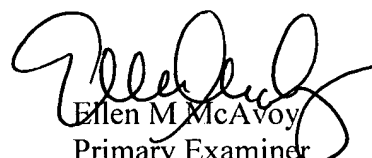
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ellen M. McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
December 20, 2006